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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,816	12/15/2005	Kiyohito Hiromitsu	8007-1100	9006
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER WEBB, GREGORY E	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 12/23/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/560,816

**Applicant(s)**

HIROMITSU ET AL.

**Examiner**

Gregory E. Webb

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06092006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 10-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsuchida et al (US 20040149312).

Tsuchida teaches sheet like members specifically for cleaning molding dies in the formation of semiconductors (see paragraphs 1-3). Tsuchida teaches the use of these sheets for removing burs and resins (paragraph 3). Tsuchida teaches the use of fiber sheets in layers for absorbing resins (see paragraph 16).

Concerning the adhesive attachment, Tsuchida, Kiyoshi teaches the following:

[0201] The **cleaning sheet** main body 31a and the reinforcing frame 31b are joined not by way of **adhesives** but preferably by embossing press bonding that utilizes, for example, indent marks 33 such as a product number as shown in FIG. 13.

3. Claims 10-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong et al (US 7179007).

Concerning the lower side, adhesive, upper side, and inner layer, Wong, Arthur teaches the following:

In one embodiment, for which a cross-sectional view is represented in FIG. 3, a drying side comprises at least a first layer of material 128, an absorbent core 228 for absorbing a product and a second layer of material 328. Once a mitt 10 is formed and the user inserts her hand in the mitt, the first layer 128 of material will typically be in contact with

the user's hand. The first layer 128 can be made of a heat sealable material, i.e. a material which is thermally bondable. As previously described, a heat sealable/thermally bondable material is particularly beneficial since it allows two or more layers of material to be thermally bonded without requiring an **adhesive** to be used. For example, the first layer 128 of a drying side 28 can be thermally bonded to the first layer 127 of a wetting side 27 to form a "chassis" along their periphery to form the seam 36. Additional layer of material can also be added on the top of the first layer 128 of the drying side 28 and thermally bonded to the "chassis." In one embodiment, additional layers can be thermally bonded and/or **adhesively** attached to the chassis. The first layer 128 of the drying side can be made of a fluid pervious or fluid impervious material depending on the kind of application. In one embodiment, a drying side can comprise at least three layers being an **inner layer**, a middle layer, which can be an Absorbent Core, and an **outer layer**. In this embodiment, the **inner layer** and the **outer layer** can be thermally bonded such that the middle layer is trapped in between. This embodiment might be particularly beneficial when a middle layer is made from a material which is not thermally bondable or a material which is thermally bondable but which would require a longer time to be thermally bonded due to thickness or high melting point.

Concerning the synthetic rubber, Wong, Arthur teaches the following:

Alternatively, it is also possible to add an elastic material to the mitt. This elastic material is preferably stretchable/deformable when it is subjected to mechanical

constraints but it returns eventually to its original shape when the mechanical constraints cease. In one embodiment, an elastic material can be deformed of at least about 50% its original size without rupturing, preferably at least about 100%, more preferably at least about 200% and even more preferably at least about 300%. This material can be in the form of a string or a film. This type of elastic material is well known in the art and non-limiting example of suitable elastic materials can be natural or **synthetic rubber**, spandex (segmented polyurethane fibers), Lycra.RTM., and the like or elastic films/composites such as Kraton.RTM.. In one embodiment, a piece of elastic material 70 is stretched and attached to a portion of the mitt 10, preferably a portion located in the inner surface of the mitt, more preferably a portion located adjacent to the opening which can be for example the cuff. When this piece of elastic material returns to its original shape, the portion of the mitt to which this elastic material is affixed, retracts as well. A user can simply stretch this portion of the mitt in order to insert her hand. The elastic material allows the mitt to be removably secured to the user's hand. A piece of elastic material 70 can also be particularly beneficial for applicators 60 which comprise only one side such as the one represented in FIG. 8.

Concerning the laminating, Wong, Arthur teaches the following:

The reservoirs can be made rupturable or "frangible" by a number of different techniques. One preferred technique is to make a pouch on a vertical or horizontal

form/fill/seal machine that has the ability to make different seals on the pouch at different temperatures, pressures or seal times. This allows one side of a pouch to have different sealing conditions that in turn can allow one side to have a weaker seal strength. A suitable sealant material for this type of "frangible" seal would be Surlyn.RTM. made by Dupont or a blend of Polybutylene with Ethylene Vinyl Acetate or ultra low density ethylene copolymers, polyolefin plastomers, and/or Polyethylene. Sealant layers made with either of these resins or blends will result in a sealant layer that will have significantly different seal strengths depending upon the seal temperature. The blend provides a "contaminant" to the base polymer material that allows the resulting seal to be selectively frangible under certain sealing conditions. For example, at 200 degree F. the sealant layer will deliver a seal force of 200 400 grams/linear inch of seal width and at 300 degree F. the seal force will deliver a seal force closer to 3000 grams/linear inch of seal width. This variation in seal strength allows a pouch to be "welded" shut in one portion and easily burstable in a second portion just by adjusting the seal temperature, the seal time and/or the seal pressure used when making the pouch seals (e.g., the pouch may be welded along all or a portion of one, two, three or more sides and easily burstable along a portion of one, two, three or more sides). A preferable film structure for this type of frangible reservoir would be Surlyn sealant/tie layer/metallized polyethylene terephthalate. Other techniques for making the consumer activated rupturable reservoirs include delaminating seals, weak regions in the film structure such as created by embossing, laser scoring, mechanical scoring or other known methods of weakening a film structure, and small thermoformed cells with thin

regions that rupture when squeezed (similar to bubble wrap). Alternatively, a reservoir 227 may have other opening means such as tear-off strips, pull tabs, release liners and the like.

### ***Conclusion***

The remainder of the references are cited as state in the art in die cleaning and/or state of the art in fibrous cleaning sheets.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/Gregory E. Webb/  
Primary Examiner, Art Unit 1796

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Primary Examiner  
Art Unit 1796

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